KONSTANTINOV, K. G.; NIKOLYUKIN, N. I.; TIMOFEYEVA, N. A.

Sturgeons

B iology of sturgeon hybrids. Dokl. AN SSSR 86 No. 2, 1952

Monthly List of Russian Accessions, Library of Congress, December 1952. UNCLASSIFIED.

USSR/Biology - Zoology

Card 1/1 : Pub. 86 - 27/34

Authors : Konstantinov, K. G.

Title : The blind codfish

Periodical : Priroda 43, 1, page 116, Jan 1954

Abstract : The characteristics of a totally blind codfish caught on May 7, 1953 in the Barents Sea, are described.

Institution : The Polar Scientific Research Institute of Sea Fisheries and Oceanography

Submitted : .....

USSR/Biology - Ichthyology

Card 1/1 Pub. 86 - 31/40

Authors : Lagunov, I. I., and Konstantinov, K. G.

Title : Baltic Sea sturgeon in the White Sea

Periodical : Priroda v.43, 3, 113-114, Mar 1954

Abstract : The probable water ways, that Baltic or Atlantic sturgeon could follow, in entering the waters of the Kandalaksh Gulf of the White Sea, are discussed. Illustration.

Institution : The Polar Scientific Research Sea Fisheries Institute and Oceanography

Submitted : ....

KONSTANTINOV, K.G.

Discovery of potential feed resources for fish through morphological analysis (exemplified chiefly by perch). Zool. zhur. 34 no.2:365-370 Mr-Ap '55. (MLRA 8:6)

1. Polyarnyy nauchno-issledovatel'skiy institut morskogo rybnogokhozyaystva i okeanografii.
(Perch) (Fishes--Food)

KONSTANTINOV, K.G.

"Specialized ichthyology." G.V.Nikol'skii. Reviewed by K.G.Konstantinov. Zool.zhur. 34 no.2:477-479 Mr-Ap '55. (MLRA 8:6)
(Nikol'skii, G.V.) (Fishes)

KONSTANTINOV, K.G.

A book full of errors. ("Inheritance of acquired characteristics." P.P.Sakharov. Reviewed by K.G.Konstantinov). Biul.MOIP. Otd.biol. 60 no.4:109-111 Jl-Ag'55. (MIRA 8:12)

(INHERITANCE OF ACQUIRED CHARACTERS) (SAKHAROV P.P.)

KONSTANTINOV, K.G.

Animals devouring their own kind. Biul.MOIP.Otd.biol. 60 no.6:
121-123 N-D '55. (MLRA 9:3)
(CANNIBALISM (ANIMALS)) (FISHES--FOOD) (MOVCHAN, V.A.)

KONSTANTINOV, K.G.

Controlled variability or natural selection [with English summary in insert]? Zool.zhur.35 no.7:972-977 Jl '56. (MIRA 9:9)

1.Polyarnyy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii.
(Variation (Biology))

KONSTANTINOV, K.G.

Comparative analysis of the morphology and biology of sea perch and the pike perches Lucioperca lucioperca L. and Lucioperca volgensis Gmel. during various developmental stages. Trudy Inst. morf. zhiv. no.16:181-236 '57. (MLRA 10:8)

(Perch)

KONSTANTINOV, K.G., kand.biol.nauk

Diurnal vertical migrations of the codfishes Gadus morhua L. and G. aeglefinus L. Trudy VNIRO 36:62-82 '58. (MIRA 12:4)
(Codfish) (Fishes--Migration) (Trawls and trawling)

KONSTANTINOV, K.G.; SHCHEGOLEV, V.D.

[redacted]

Myxine caught near the coast of Iceland [with summary in English].
Zool. zhur. 37 no.11:1745 N '58. (MIRA 11:12)

1. Polyarnyy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii (Murmansk).
(Iceland--Hagfish)

KONSTANTINOV, K.G.

[Commercial fish of Barents Sea and their feeding; a manual for crews of trawler fleets] Promyslovye ryby Barentseva moria i ikh pitanie; rukovodstvo dlia plavsostava tralovogo flota. Izd.2. Murmansk, Murmanskoe knizhnoe izd-vo, 1959. 46 p.

(Barents Sea--Fishes--Food) (MIRA 13:4)

MARTI, Yu.Yu., otv.red.; MASLOV, N.A., zam.otv.red.; ALEKSEYEV, A.P., red.; VINOGRADOV, L.G., red.; DMITRIYEV, N.A., red.; ZAYTSEV, G.N., red.; KONSTANTINOV, K.G., red.; MUNTYAN, V.M., red.; CHUMAKOVA, L.S., red.; YUDANOV, I.G., red.; LANDA, N.G., red.; AYNZAFT, Yu.S., red.; KLYACHKO, I.I., red.; UKRAINTSEVA, D.V., tekhn.red.

[Soviet fisheries investigations in North European seas] Sovetskie rybokhoziaistvennye issledovaniia v moriakh Evropeiskogo Severa. Moskva, Rybnoe khoziaistvo VNIRO, 1960. 468 p.
(MIRA 14:1)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii. 2. Vsesoyuznyy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii (for Marti, Dmitriyev, Zaytsev). 3. Polyarnyy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii (for Maslov, Alekseyev, Yudanov).
(Fisheries--Research)

KONSTANTINOV, K.G.; PONOMARENKO, V.P.

Long lasting group migrations of the codfish of the Barents Sea according to tagging data. Trudy MMBI no.2:207-210 '60. (MIRA 14:2)

(Barents Sea—Codfish) (Fishes—Migration)

KISELEV, O.N.; KONSTANTINOV, K.G.

Vertical distribution of the codfishes Gadus morhua morhua L. and Melanogrammus aeglefinus (L.) in the Barents Sea (according to the data of hydroacoustical observations). Vop.ikht. no.14: 66-70 '60. (MIRA 13:8)

1. Polyarnyy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii (PINRO).
(Barents Sea--Codfish) (Sonar in fishing)

KONSTANTINOV, K.G.; SOROKIN, V.P.

Common European eel in the Kola Gulf. Zool.zhur. 39 no.4:621 Ap '60. (MIRA 13:11)

1. Laboratory of Bottom Fishes, Polar Research Institute of Marine Fishery Managment and Oceanography, Murmansk.
(Kola Gulf—Eels)

KONSTANTINOV, K.G.

Tagging of bottom fishes in the Barents Sea. Vop.ikht. 1 no.2:
275-280 '61. (MIRA 14:6)
(Barents Sea—Fish tagging)

KONSTANTINOV, K.G.

Sea lamprey (Petromyzon marinus L.) at the Murman Coast. Zool. zhur. 40 no.6:938-939 Je '61. (MIRA 14:6)

1. Polar Research and Designing Institute of Marine Fishery Management and Oceanography, Murmansk.
(Murman Coast—Lampreys)

MARTI, Yu.Yu., otv. red.; ALEKSEYEV, A.P., zam. otv. red.; NOSKOV, A.S., zam. otv. red.; BORODATOV, V.A., red.; VINOGRADOV, L.G., red.; ZAYTSEV, G.N., red.; IZHEVSKIY, G.K., red.; KAZANOVA, I.I., red.; KONSTANTINOV, K.G., red.; MUNTYAN, V.M., red.; NAUMOV, V.M., red.; SEDYKH, K.A., red.; FEDOSOV, M.V., red.; CHUMAKOVA, L.S., red.; AYNZAFT, Yu.S., red.; MUKHINA, Ye.M., red.; FORMALINA, Ye.A., tekhn. red.

[Soviet fishery research in the northwestern part of the Atlantic Ocean] Sovetskie rybokhoziaistvennye issledovaniia v severo-zapadnoi chasti Atlanticheskogo okeana. Moskva, Izd-vo zhurnala "Rybnoe khoziaistvo," 1962. 375 p. (MIRA 15:7)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii. 2. Vsesoyuznyy nauchnyy institut morskogo rybnogo khozyaystva i okeanografii (for Marti, Fedosov).
(Atlantic Ocean—Fisheries—Research)

KONSTANTINOV, K.G., kand.biolog.nauk

Marked fishes. Nauka i zhizn' 29 no.12:50-54 D '62.
(MIRA 16:9)

1. Polyarnyy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii, Murmansk.

(Fish tagging)

KONSTANTINOV, K.G., kand.biolog.nauk

The gurnard Trigla gurnardus L. at the Murman Coast. Priroda 52 no.3:112-113 '63. (MIRA 16:4)

1. Polyarnyy nauchno-issledovatel'skiy i proyektnyy institut morskogo rybnogo khozyaystva i okeanografii im. N.M.Knipovicha (Murmansk).

(Murman Coast--Gurnards)

ALEKSEYEV, A.P., otv. red.; ADROV, M.M., spets. red.; KONSTANTINOV, K.G., spets. red.; KUTAKOV, B.G., red.; MASLOV, N.A., red.; MINDER, L.P., red.; NIKOL'SKIY, L.S., red.; STAROVOYTOV, P.A., red.; SURKOV, S.S., red.; KHRANOVSKIY, A.Yu., red.; YUDANOV, I.G., red.; VOROB'YEV, A.T., red.

[Materials of the session of the Scientific Council of the Arctic Scientific Research Institute of Marine Fisheries and Oceanography dealing with the results of research in 1962-1963] Materialy sessii Uchenogo soveta PINRO po rezul'tatam issledovanii v 1962-1963 gg. Murmansk, 1964. 237 p. (MIRA 18:1)

1. Murmansk. Polyarnyy nauchno-issledovatel'skiy i proyektnyy institut morskogo rybnogo khozyaystva i okeanografii. 2. Direktor Polyarnogo nauchno-issledovatel'skogo i proyektnogo instituta morskogo rybnogo khozyaystva i okeanografii, Murmansk (for Alekseyev). 3. Laboratoriya vosproizvodstva Polyarnogo Nauchno-issledovatel'skogo i proyektnogo instituta morskogo rybnogo khozyaystva i okeanografii, Murmansk (for Surkov). 4. Laboratoriya tekhniki promyshlennogo rybolovstva Polyarnogo nauchno-issledovatel'skogo i proyektnogo instituta morskogo rybnogo khozyaystva i okeanografii, Murmansk (for Starovoytov).

KONSTANTINOV, K., kand. biolog. nauk

Turtle in the Barents Sea. Priroda 54 no.3:111 Mr '65.
(MIRA 18:4)

1. Polyarnyy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii, Murmansk.

KONSTANTINOV, K.K.

Cellulose condensate filter. Energetik 9 no.12:16-17 D '61.
(MIRA 15:1)
(Feed-water purification) (Filters and filtration)

MANICHKOV, K. S., KONSTANTINOV, K. M., SEMEVSKIY, V. V.

Foundations

Rapid erection of foundations and walls of basements. Gor. khoz. Mosk. 27 No. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

KONSTANTINOV, K.M., inzhener; STANKOVSKIY, A.P., inzhener.

New machinery for mechanizing construction work. Mekh.stroi. 13
no.6:28-34 Je '56. (MIRA 9:9)
(Building machinery)

DANILKIN, V.A.; KONSTANTINOV, K.M.; BULATOVA, G.I.

Determination of hydrogen in solid aluminum and aluminum alloys.
Zav.lab. 27 no.3:259-261 '61. (MIRA 14:3)
(Aluminum—Hydrogen content)
(Hydrogen—Analysis)

L 15510-63 EWP(q)/EWT(m)/BDS AFFTC/ASD JXT(IJP)/JD/JG
ACCESSION NR: AP3004591 S/0126/63/016/001/0057/0060

60
59

AUTHOR: Kornilov, I. I.; Mikheyev, V. S.; Konstantinov, K. M.

TITLE: Investigation of resistivity of alloys of the Ti-Al system from room temperature to 1200C

11

SOURCE: Fizika metallov i metallovedeniye, v. 16, no. 1, 1963, 57-60

TOPIC TAGS: titanium aluminum alloy, titanium aluminum system, titanium aluminum alloy resistivity, resistivity temperature gradient

ABSTRACT: The resistivity of 11 Ti-Al alloys containing 0—17.5% Al was measured in the range from room temperature to 1200C. Alloys were melted from TG-00 titanium sponge and 99.9% pure Al, annealed at 900C for 100 hr, 800C for 200 hr, and 700C for 100 hr, and furnace-cooled. Test specimens approximately 30 x 5 x 2.5 mm were stress-relieved at 700—750C for 30 min in a vacuum of 10^{-4} mm Hg. The test results (see Fig. 1 of the Enclosure) show

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L 15510-63

ACCESSION NR: AP3004591

that Al increases resistivity. At 900—1100C, the temperature of α to β transformation, resistivity decreases sharply. The temperature gradient of resistivity decreases with increasing Al content, and for alloys with 7.5—17.5% Al it is close to zero. Unalloyed titanium shows a considerable change of resistivity, from 0.5 ohm mm^2/m at room temperature to 1.65 ohm mm^2/m at the temperature of $\alpha \rightleftarrows \beta$ transformation. The temperature gradient of the β-phase of unalloyed titanium at 910—1000C is 0.012 μohm cm/deg. The diagram of $\alpha \rightleftarrows \beta$ transformation for Al contents from zero to 17.5% plotted on the basis of resistivity measurements coincides in general with diagrams obtained by other methods. Orig. art. has: 2 figures.

ASSOCIATION: Institut metallurgii im. A. A. Baykova AN SSSR (Institute of Metallurgy, AN SSSR)

SUBMITTED: 09Oct62 DATE ACQ: 27Aug63 ENCL: 01

SUB CODE: MA, ML NO REF SOV: 003 OTHER: 007

Card 2/2

L 36527-66 EWT(m)/EWP(w)/T/EWP(t)

ACC NR: AT6012390 SOURCE CODE: UR/0000/65/000/000/0189/0197

66

AUTHORS: Fedotov, S. G.; Konstantinov, K. M.; Sinodova, Ye. P.

ORG: none

21

TITLE: Physical properties of binary alloys of titanium in the tempered state

SOURCE: Soveshchaniye po metallokhimii, metallovedeniyu i primeneniyu titana i yego splavov, 6th. Novyye issledovaniya titanovykh splavov (New research on titanium alloys); trudy soveshchaniya. Moscow, Izd-vo Nauka, 1965, 189-197

TOPIC TAGS: ~~metallurgy~~, titanium, titanium alloy, ~~elastic property~~, electric resistance, thermal property, metallurgic research, binary alloy, elasticity, tempering metal hardness

ABSTRACT: The concentration variation of elastic and electrical properties of titanium alloys, which are tempered from the β-region, is established. Two groups of titanium alloys were studied: alloys with molybdenum, vanadium, and niobium and alloys with chromium, manganese, iron, cobalt, and nickel. Specimens of these types were subjected to a series of sensitive tests for measuring their elastic properties and electrical resistance. The content of the alloying element played the role of the independent variable. Other observations were made of the variation of the microstructure of the alloys with content and temperature. It was established that the elastic and electrical properties are sensitive to the structuring of tempered

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Card 1/2

KONSTANTINOV, Kr.

A new micromethod for the determination of erythrocytic resistance.
Suvr. med. (Sofiia) 15 no.10:34-40 '64.

KONSTANTINOV, K.T., agronom.

Can that book really serve as a textbook? ("Organizing socialist agriculture" T.L.Basiuka. Reviewed by K.T.Konstantinov.) Nauka i pered.op.v sel'khoz.7 no.1:81-84 Ja '57. (MLRA 10:2)
(Agriculture, Cooperative--Textbooks) (Basiuka, T.L.)

VILYUNOV, G.A., polkovnik meditsinskoy sluzhby; STRABYKIN, G.M., polkovnik meditsinskoy sluzhby; KONSTANTINOV, K.P., podpolkovnik meditsinskoy sluzhby

Commander as the leader of sanitary education and training. Voen.-med. zhur. no.10:9-11 '64. (MIRA 18:5)

Konstantinov, K. T.

KONSTANTINOV, K.T., agronom.

Against narrow specialization on state farms. Nauka i pered. op. v sel'khoz. 7 no.10:70-72 O '57. (MIRA 10:11)
(State farms)

KONSTANTINOV, L.

"New City Plan of Dimitrovo", p. 2. "Utilizing New Methods", p. 2. (TEKHNICHESKO DELO, Vol. 5, no. 111, Sept. 1953, Sofiya, Bulgaria).

SO: Monthly List of East European Accessions, LC, Vol. 3, No. 4, April 1954.

KONSTANTINOV, L., kand. tekhn. nauk, obshchestvennyy instruktor podvodnogo sporta

Night submersions of submarine divers. Voen. znan. 39 no.12:35 D '63. (MIRA 17:1)

KONSTANTINOV, L.; KOLEV, D. (Sofiya)

Preparation of ether-valerian tincture in large-scale production.
Apt. delo 10 no.3:85 My-Je '61. (MIRA 14:7)
(VALERIAN)

KONSTANTINOV, L., kand.tekhn.nauk, instruktor podvodnogo sporta
(Kaliningrad)

Using an aqualung in topographic surveys. Voen.znan. 38 no.12:35
D '62. (MIRA 15:12)
(Hydrographic surveying) (Aqualung)

KONSTANTINOV, L., kand.tekhn.nauk, vneshtatnyy instruktor podvodnogo sporta (Kaliningrad)

Navigation instruments for underwater swimming. Voen. znan. 39 no.3:29-30 Mr '63. (MIRA 16:7)
(Swimming--Equipment and supplies)

KONST'NTINOV, L.

"The Role of the District Agronomist At Machine-Tractor Stations. p. 46." (KOOPFRATIVNO ZEMEDELIE) Vol. 8, No. 7/2 1953, Sofiya, Bulgaria.

SO: Monthly List of East European Accessions L.C. Vol. 2, No. 11 , Nov. 1953, Uncl.

KONSTANTINOV, L.

Organizatsiia i upravlenie na MTS. Sofiia, Zemizdat, 1954. 122 p. (Organization and management of the machine-tractor station. illus., bibl.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 6 June 1956, Uncl.

KONSTANTINOV, L.

Preparation and adjustment of the tractor plow for work. p. 7.

Vol. 6, no. 8, Aug. 1955
MASHINIZIRANO ZEMEDELIE
Sofiya, Bulgaria

So: Eastern European Accession Vol. 5 No. 1 Jan. 1956

KONSTANTINOV, L.

Mechanized cultivation of cotton planted with narrowed furrows. p. 16.
Vol. 7, no. 4, Apr. 1956, MASHINIZIRANO ZEMEDELIE, SOFIYA, BULGARIA.

Source: Monthly List of East European Accessions, (EEAL), Library of Congress, Vol. 5, No. 10, Oct. 1956.

KONSTANTINOV, L.

Productive agricultural bases connected with machine-tractor stations.

P. 3, (Mashinizirano Zemedelie) Vol. 8, no. 3 Mar. 1957, Sofia, Bulgaria

SO: Monthly Index of East European Accessions (EEAI) Vol. 6, No.11 November 1957

KONSTANTINOV, L., kand. tekhn. nauk, instruktor podvodnogo sporta

Will of the aqualunger. Voen. znan. 42 no.2:41 F '66.
(MIRA 19:1)

KONSTANTINOV, L., kand. tekhn. nauk, instruktor podvodnogo sporta

Command search. Voen. Znan. 41 no.5:44-45 My '65. (MIRA 18:5)

KONSTANTINOV, L., kand. tekhn. nauk

Training of an aqualung team. Voen. znan. 40 no.9:44 S '64.
(MIRA 17:12)

1. Obshchestvennyy instruktor podvodnogo sporta Vsesoyuznogo obshchestva sodeystviya armii, aviatsii i flotu, Kaliningrad.

B/501/59/007/000/005/005
D278/D303

AUTHOR: Konstantinov, L.B., Engineer

TITLE: An approximate analytical method of dynamic stability calculation in simple diagrams

PERIODICAL: Bulgarska akademiya na naukite. Izvestiya. Tekhnicheski Institut. Otdelenie za fiziko-matematicheski i tekhnicheski nauki, v. 7-8, 1959, 257-281

TEXT: The article deals with estimating dynamic stability in simple diagrams including the cases where one or two independent e.m.f. occur. The author attempted to give an approximate, but complete analytical solution of problems relating to the above mentioned diagrams. The purpose of the study was to obtain the same results as obtained by the complicated "step-by-step" method, but by not so many calculations. The results obtained by the author do not differ from the results obtained by the "step-by-step" method, and permit determination of the cut-off period by using an analytical formula without any graphical presentations which are necessary in the "step-by-step" method. If the

Card 1/2

L 61066-65 EPF(c)/EPA(s)-2/EWP(j)/EWT(m)/T Pc-4/Pr-4/Ps-4 RM/WW

ACCESSION NR: AP5017878 UR/0286/65/000/011/0130/0130

[illegible]gansky, A. I.

TITLE: Dirigible hull. Class 62, No. 171738

SOURCE: Byulleten' izobreteniy i tovarnykh znakov. no. 11, 1965, 130

[illegible] dirigible, dirigible hull, [illegible]

[illegible] Certificate has been issued [illegible] featuring in- [illegible] uniform distributi[illegible] [illegible] an elastic [illegible] [illegible] . The [illegible] [illegible] fig. art. has [illegible]

ASSOCIATION: none

SUBMITTED: 26Aug63 ENCL: 01 SUB CODE: AC, MT

NO REF SOV: 000 OTHER: 000 ATD PRESS: 4060

Card 1/2

Card 2/2 plastic filler.

AYRUMOV, A.M.; KONSTANTINOV, L.P., redaktor; MURATOVA, V.M., vedushchiy redaktor; TROFIMOV, A.V., tekhnicheskiy redaktor.

[Core bits for rotary drilling] Kolonkovye dolota dlia vrashchatel'nogo bureniia. Moskva, Gos. nauchno-tekhn. izd-vo neftianoi i gorno-toplivnoi lit-ry, 1953. 95 p. [Microfilm] (MLRA 7:10)
(Boring machinery)

AID P - 540

Subject : USSR/Engineering

Card 1/1 Pub. 78 - 6/29

Authors : Konstantinov, L. P. and Mokshin, A. S.

Title : Some deductions from analysis of the work of triple gear core drills

Periodical : Neft. Khoz., v. 32, #7, 23-27, Jl 1954

Abstract : Analysis of the reports on a series of experiments on various types of core drills conducted during 1952 and 1953. Data on the drills are presented in 2 tables and the operational characteristics in 4 charts.

Institution: (Glavneftmash) Main Administration of Machine Building in the Petroleum Industry

Submitted : No date

---

speed filming. The results are given. Photos, chart

Institution: (All-Union Scientific Research Institute for Oil Drilling) VNIIburneft'

Submitted : No date

GRISHIN, A.S., inzh.; KONSTANTINOV, L.P.; KOROL'KO, Ye.I.; EDEL'SHTEYN, Ye.I.;
EYGELES, R.M.

Destruction of brittle bodies. Trudy VNIIBT no.1:131-133 '58.
(MIRA 11:12)

(Rocks)

KONSTANTINOV, L.P., inzh.; FAL'KON, S.M., inzh.; EYGELES, R.M., kand.tekhn.nauk

Study of bit torsional moments. Trudy VNIIBT no.3:14-17 '61.
(MIRA 15:1)

(Turbodrills)

KONSTANTINOV, L.P.

Criteria of bit quality. Trudy VNIIBT no.6:24-27 '62.
(MIRA 16:6)
(Boring machinery—Testing)

KONSTANTINOV, L.P., inzh.; MOKSHIN, A.S., inzh.; PEREGUDOV, A.A., inzh.; ABRAMSON, M.G., kand. tekhn. nauk; ANDREYEV, A.V., inzh.; DYUKOV, N.G., inzh.; MIRONOV, A.L., inzh.; OSIPOV, G.M., inzh.

Studying the performance of pin roller bits in strip mining and ways of improving their design. Gor. zhur. no.9:42-46 S '65.
(MIRA 18:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut burovoy tekhniki, Moskva.

KONSTANTINOV, L.S.

Centrifugal casting of shaped parts. Lit. proizv. no.5:5-7 My '62.
(MIRA 16:3)

(Centrifugal casting)

KONSTANTINOV, L. S.

"Problems of the Theory of Centrifugal Casting." Thesis for degree of Cand. Technical Sci. Sub 28 Jun 49, Moscow Automotive Mechanics Inst.

Summary 82, 18 Dec 52, Dissertations Presented for Degrees in Science and Engineering in Moscow in 1949. From Vechernyaya Moskva, Jan-Dec 1949.

KOROLEV, N.I.; KONSTANTINOV, L.S., kandidat tekhnicheskikh nauk, retsenzent; RABINOVICH, B.V., kandidat tekhnicheskikh nauk, redaktor; TIKHONOV, A.Ya., tekhnicheskiy redaktor; MODEL', B.I., tekhnicheskiy redaktor.

[Technology of cast iron production] Tekhnologiia chugunoliteinogo proizvodstva. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1951. 219 p. [Microfilm] (MLRA 7:12)
(Cast iron)

KONSTANTINOV L.S.

CHUNAYEV, M.V., kandidat tekhnicheskikh nauk; KONSTANTINOV, L.S., kandidat tekhnicheskikh nauk, retsenzent; GOLOVIN, S.Ya., inzhener, redaktor literatury po tyazhelomu mashinostroyeniyu; MATVEYEVA, Ye.N., tekhnicheskiy redaktor.

[Lubrication of foundry equipment] Smazka oborudovaniia liteinykh tsekhov. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1952. 91 p. [Microfilm] (MLRA 7:10)
(Foundries) (Lubrication and lubricants)

KONSTANTINOV, L. S.

Founding

Further development of the method of criticism and self-criticism in science. Lit. proizv. no. 2, 1952.

Monthly List of Russian Accessions, Library of Congress, April 1952. UNCLASSIFIED.

KONSTANTINOV, L. S.

Founding - Terminology

Problem of terminology in foundry production. Lit, proiz., No. 4, 1952.

Monthly List of Russian Accessions, Library of Congress, October 1952. UNCLASSIFIED.

Peculiarities of crystallization in centrifugal casting. L. S. Konstantinov. *Liteinoe Proizvodstvo* 1952, No. 9, 30-3. —Present theories are reviewed. Superior feeding in centrifugal casting is assocd. with the gravitational coeff. to which each particle of metal is subjected. This conception is developed. Pore formation in castings may be assocd. with the pptn. of crystals having a lower specific gravity and a higher m.p. than the remaining matrix. They are rejected towards the inside, form a crust, after which the solidification progresses from outside leading to the formation of shrinkage cavities. J. D. Gat

KONSTANTINOV, L.S.

Contribution to the Theory of Centrifugal Casting. L. S. Konstantinov. (*Liteinoe Proizvodstvo*, 1955, (1), 30–31). [In Russian].—A critical review is presented of some recent theoretical work on the determination of the free surface of a liquid in a vessel rotating about a horizontal axis.—S. K.

MG

BAYKOV, Aleksey Ivanovich, kandidat tekhnicheskikh nauk; KONSTANTINOV, L.S., kandidat tekhnicheskikh nauk, retsenzent; KRYLOV, V.I., inzhener, redaktor; MATVEYEV, Ye.N., tekhnicheskiy redaktor

[Centrifugal casting] TSentrobezhnoe lit'e. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1956. 150 p. (MIRA 10:3)
(Centrifugal casting)

GLADILIN, Anatliy Nikolayevich, kandidat tekhnicheskikh nauk; DUBININ, Nikolay Petrovich, kandidat tekhnicheskikh nauk; ZHEVTUNOV, Petr Prokhorovich, kandidat tekhnicheskikh nauk; KRASAVIN, Vasiliy Stepanovich, kandidat tekhnicheskikh nauk; NAZAROV, Sergey Tikhonovich, kandidat tekhnicheskikh nauk; PANCHENKO, Konstantin Petrovich, kandidat tekhnicheskikh nauk; POPOV, Viktor Aleksandrovich, kandidat tekhnicheskikh nauk; POPOV, Yevgeniy Aleksandrovich, kandidat tekhnicheskikh nauk; RASTORGUYEV, Ivan Sergeyevich, kandidat tekhnicheskikh nauk; STOROZHEV, Mikhail Vasil'yevich, kandidat tekhnicheskikh nauk; KONSTANTINOV, L.S., kandidat tekhnicheskikh nauk, redaktor; ROZENBERG, G.A., kandidat tekhnicheskikh nauk, redaktor; MODEL', B.I., tekhnicheskiy redaktor

[Technology of metals] Tekhnologiia metallov. Pod red. N.P.Dubinina. Izd. 2-oe. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1956. 550 p. (MLRA 9:8)

1. Prepodavateli Moskovskogo Vyschego tekhnicheskogo uchilishcha im. Baumana (for Gladilin, Dubinin, Zhevtunov, Krasavin, Nazarov, Panchenko, Popov, V.A., Popov, Ye.A., Rastorguyev, Storozhev)
(Metallurgy) (Metalwork)

KONSTANTINOV L.S.

Category : USSR/Solid State Physics - Mechanical properties of crystals and polycrystalline compounds E-9

Abs Jour : Ref Zhur - Fizika, No 1, 1957, No 1326

Author : Konstantinov, L.S.
Title : Internal Stresses in Castings in the Region of the Plastic State of Metal

Orig Pub : Vopr. liteynogo proizv-va i termicheskoy obrabotki chuguna. M., Mashgiz. 1956, 26-40

Abstract : No abstract

Card : 1/1

LEVIN, Moisey Markovich; POPOVA, Natal'ya Yur'yevna; KONSTANTINOV, L.S., kand. tekhn. nauk, retsenzent; CHERNYSHOVA, L.S., red. izd-va; SHIKIN, S.T., tekhn. red.

[Centrifugal casting of metals; survey of foreign literature] TSentrobezhnaia otlivka metallov; obzor inostrannoi literatury. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1957. 60 p. (MIRA 11:8)

(Centrifugal casting)

PHASE I BOOK EXPLOITATION 1064

Kanevskaya, Tamara Borisovna and Konstantinov, Leonid Sergeyevich

Mashiny i tekhnologiya tsentrobezhnogo lit'ya chugunnykh trub (Machines and Technology of Centrifugal Casting of Pipes) Moscow, Metallurgizdat, 1958. 275 p. 4,000 copies printed.

Ed.: Manakin, N.V.; Ed. of Publishing House: Golyatkina, A.G.; Tech. Ed.: Vaynshteyn, Ye.B.

PURPOSE: The purpose of this book is to serve as a manual for training centrifugal casting machine operators. It may also be used to improve the skills of personnel in centrifugal casting shops. The book was written in accordance with the program of the Glavnoye upravleniye trudovykh reservov (Chief Administration of Labor Reserves) under the USSR Council of Ministers.

COVERAGE: This book consists of two parts. Part 1 deals with the historical development and the principles of casting. Preparation of the various types of molds and cores and the properties of metals and alloys are described. Part 2 is devoted to the principles and methods of centrifugal casting of gray cast iron pipes. Various types of centrifugal casting machines and their maintenance

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AVAILABLE: Library of Congress

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SOV/130-58-9-23/23

AUTHORS: ~~Konstantinov, L.S.~~ and Khakhalin, B.D., Candidates of Technical Sciences and Smolyakov, A.N., Engineer

TITLE: Centrifugal Casting of Cast-iron Tubes in the Chinese People's Republic (Tsentrobezhnaya otlivka chugunnykh trub v Kitayskoy Narodnoy Respublike)

PERIODICAL: Metallurg, 1958, Nr 9, pp 38 - 39 (USSR)

ABSTRACT: In the tube mill of the An'shan Metallurgical Combine, cast-iron water pipes 200-600 mm in diameter are cast centrifugally. The moulds are made on a special installation (Figure 1). Separate machines are used for casting pipes 200 and 250 mm in diameter (Figure 2) and those 300-600 mm in diameter (Figure 3). The authors outline the practice and tabulate the durations of the operations for pipes of various diameters. The inner surface of the pipes is cleaned with an emery wheel. There are 4 figures and 1 table.

Card 1/1 1. Pipes--Casting 2. Cast iron--Applications 3. Centrifuges --Applications

USCOMM-DC-55789

SOSNENKO, Mikhail Nikolayevich; KONSTANTINOV, L.S., kand,tekhn.nauk, retsenzent; GRUZDEV, A.N., inzh., retsenzent; SMETANIN, A.A., inzh., red.; GRUSHEVSKAYA, G.M., red.izd-va; UVAROVA, A.F., tekhn.red.

[Present-day founding molds] Sovremennye liteinye formy. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1959. 274 p. (MIRA 12:6)

(Molding (Founding))

KONSTANTINOV, L.S.

AUTHOR: None given SOV/180-59-4-47/48

TITLE: A Conference on the Accuracy of Machine Building Castings

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Metallurgiya i toplivo, 1959, Nr 4, pp 255-256 (USSR)

ABSTRACT: A conference on the above subject took place in the Institute of Machine Building of the Academy of Sciences of the USSR on 22-24th April 1959. About 200 representatives of scientific-research institutes, laboratories, universities and largest works from 34 towns participated in the conference. The following papers were read: B.B.G'ulyayev "The present state of studies of the accuracy of castings"; P.N.Aksenov "Tasks of investigations of the dependence of the accuracy of castings on technological factors"; N.P.Borg "Methods of analytical evaluation of dimensions of castings"; Yu.A.Vorob'yev "Theoretical and experimental investigations of the accuracy of castings"; I.P.Yegorenkov - "The system of allowances for mechanical working of castings"; Ye.G.Kopanevich "Methods for the determination of tolerances for dimensions of cast parts"; S.A.Kazenkov "Tolerances for non-ferrous castings produced by various methods of casting"; G.N.Nikol'skiy "Methods of controlling the cleanliness of the surfaces of castings"; L.S.Konstantinov "The influence of stresses formed during casting on the accuracy of castings"; L.Ye.Komarov "The process of jacking moulds as a factor determining the accuracy of castings"; S.S.[illegible] and Yi Ch'unn-shin "Sources of errors in the dimensions of castings caused by specific features of operation of the pattern-mould boxes equipment"; A.M.Dubrovskiy "Typical deformations of casting moulds"; V.O.Yakovlev "Conditions of making accurate castings in sand moulds"; M.P.Ivanov "The influence of the chemical composition of iron on the accuracy of dimensions of castings"; S.N.Ponchenko and B.B. Gulyayev "Improvement in the accuracy of castings made in pressed shell moulds"; V.V.Ryzhenkov "Experience in increasing the cleanliness and accuracy of large castings", N.N.Rubtsov and I.I.Zhel'kov "On the accuracy of castings made by the lost wax method", I.I.Goryunov "An investigation of the accuracy and surface cleanliness of castings made under pressure and by the lost wax method"; M.F.Makel'skiy and B.B.Gulyayev "The formation of the contour of castings during casting under pressure"; K.G.Kovvi, A.A.Dodonov and N.N.Belousov "An improvement in the surface quality of castings made under pressure by forming a vacuum the pressure moulds". It was established that studies on the subject of the accuracy of castings are developing too slowly mainly due to lack of coordination in the research work and insufficient numbers of specialists in the field of mathematics, physics and electronics. In order to develop methods for overall calculations of the accuracy, productivity and economics of casting processes the conference recommended organizing in Moscow, Leningrad and Kiyev (at scientific research institutes and universities) mixed teams consisting of foundry specialists, mathematicians, physicists and economists. 30

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18(57

SOV/128-59-6-11/25

AUTHOR: Konstantinov, L.S., Candidate of Technical Sciences

TITLE: Phenomena Associated with Gas Evolution During Centrifugal Casting and Resulting Defects in Faulty Castings

PERIODICAL: Liteynoye Proizvodstvo, 1959, Nr 6, pp 32-35 (USSR)

ABSTRACT: During centrifugal casting by means of metal dies, various defects are observed. For the most part, they are related to the gases that are formed within the metal dies. The sources of the gas formation might be of different origin. In many cases, this evolution of gas is not yet clarified. But practice showed that these gases do not influence the whole surface of the cast shape, but only individual areas (20 to 25 faults within 1 square centimeter). This creates the impression that the gases are separated only from individual areas of the metal die. After an explanation for the relation between the pressure and the volume of the gas (according to the Boyel-Mariotte law), the author describes the paths of the gas particles and explains

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SOV/128-59-6-11/25

Phenomena Associated with Gas Evolution During Centrifugal Casting and Resulting Defects in Faulty Castings

the possibilities of defects, especially those in cast shapes with thin walls (e.g. pipes), forming different types of blisters. Some of them might occupy up to 80% of the thickness of the wall. Several experts and scientists (Lyamin, P. "Centrifugal Cast ing". in "Institute for Technical Information" (USSR, Nr 1. 1942) erronously counted those blisters as defects that might appear when casting special shapes. The whole field of gas evolution and its influence on the defects of the castings have been studied very little. The fight against poor quality of castings in this manner is, therefore, wasteful. Measures leading to a removal of these defects are the following: use steel dies instead of cast iron dies; strictly keep the set rules for heating during casting; renounce materials containing humidity; use dies with a clean working surface; grind the permanent molds periodically, etc. There are 12 diagrams, 1 photograph and 3 Soviet references.

Card 2/2

18(5,7) SOV/128-59-6-23/25

AUTHOR: Konstantinov, L.S., Baykov, A.I., Kanevskaya, T.B., Candidates of Technical Sciences; Lebedev, K.P., Assistant Professor, Levin, M.M., Novikov, P.G. Rozenfel'd. S.Ye. and Khakhalin, B.D., Candidates of Technical Sciences

TITLE: Letter to the Editor

PERIODICAL: Liteynoye Proizvodstvo, 1959, Nr 6, pp 44-46

ABSTRACT: The authors begin their letter to the author by listing the difficulties, when explaining the basic terms of mechanics and generally of every science. Since the time of Newton there existed difficulties in explaining and formulating correctly the term "power". With the development of the sciences during the recent years these difficulties have become even greater. The Academician, B.N. Yur'yev is quoted from his book "**Attempted** new Formulation of the Basic Laws on Mechanics by Newton", Printing Office Academy of Sciences (USSR) 1952. But these new theories have had no influence on

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SOV/128-59-6-23/25

Letter to the Editor

the practical work of the engineer. In the field of centrifugal casting B.I. Loshkarev has written an article (published in Liteynoye Proizvodstvo, Nr 8, 1957), in which he made the following statement: 1) Metal is not influenced by centrifugal force and, therefore, the existing theories on centrifugal casting, based on centrifugal forces, do not correspond to the physical properties of the process. 2) The theory of centrifugal casting is not confirmed by his experiments; 3) The factors of centrifugal casting are to be explained by other factors, like: tendency forces, speed of chilling, temperature of the metal, process of crystallization. The authors refute the statements of Loshkarev and call his comprehensions "unintelligible" and "unfounded". There are 1 diagram and 9 Soviet references.

Card 2/2

SOV/128-59-11-13/24

24 (8)

AUTHOR: Konstantinov, L.S., Candidate of Technical Sciences

TITLE: Estimation of Thermal Stresses and Deformations in Castings with Permanent Cross-Section (Method of Moving Neutral Line)

PERIODICAL: Liteynoye proizvodstvo, 1959, Nr 11, pp 27-31 (USSR)

ABSTRACT: When a homogeneous solid is heated or cooled, thermal stresses appear in it. These stresses tend to change the original dimensions and the form of the solid. The author analyzes several cases of solid thermal deformation and concludes that the change of geometrical size of a solid, when it can freely alter its form does not depend on any properties of its material, but only on its coefficient of thermal expansion. On the other hand, deformation of a solid can be either resilient or plastic, depending on its material, but this deformation can appear only with the application of certain mechanical work. Inasmuch as no external forces are applied to the solid, deformation can en-

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SOV/128-59-11-13/24

Estimation of Thermal Stresses and Deformations in Castings with Permanent Cross-Section (Method of Moving Neutral Line)

sue only as a result of internal force action. Hence the conclusion that in any solid which is subjected to heating or cooling, strains must inevitably appear. As an example, the author takes a cast iron plate, 50 mm in thickness, which is cooled under variable conditions of heat emission. Having made the necessary computations, the author gives the final values: maximum extension stress $\sigma_1 = 0.625$ kg/mm^2; maximum compression stress $\sigma_2 = -1.25$ kg/mm^2. In another example, the author takes a steel beam, 2m in length. At the moment of final cooling, the warping is determined as follows: Radius of curvature

$$r = \frac{1}{12.10^{-6}.0.896} .93000 \text{ mm};$$

deflection $\delta = 93000 - \sqrt{93000^2 - 1000^2} = 10$ mm. There are 4 graphs and 6 diagrams.

Card 2/2

SOSNENKO, Mikhail Nikolayevich; KONSTANTINOV, L.S., nauchnyy red.;
PROKOF'YEVA, L.G., red.; RAKOV, S.I., tekhn.red.

[Machine molder] Formovshchik mashinnoi formovki. Moskva,
Vses.uchebno-pedagog.izd-vo Proftekhizdat, 1960. 201 p.
(MIRA 14:1)

(Machine molding (Founding))

AKSENOV, P.N.; BERG, P.P.; GODASHKOV, N.M.; VEYNIK, A.I.; GORSHKOV, A.A.; ZHAROV, N.T.; ZHUKOV, A.A.; ZOROKHOVICH, I.Z.; KUMANIN, I.B.; LEVI, L.I.; LYASS, A.M.; MARIYENBAKH, L.M.; ORLOV, G.M.; PORUCHIKOV, Yu.P.; RABINOVICH, B.V.; STOLBOVOY, S.Z.; FEYGEL'SON, B.Yu.; VASILEVSKIY, P.F., red.; KLOCHNEV, N.I., red.; KONSTANTINOV, L.S., red.; POLYAKOV, Ya.G., red.; MARKIZ, Yu.L., red.izd-va; UVAROVA, A.F., tekhn.red.

[Theory of founding processes] Voprosy teorii liteynykh protsessov. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960. 692 p. (MIRA 13:7)

(Founding)

KONSTANTINOV, L.S., kand.tekhn.nauk

Batching of molten metal and the precision of centrifugal casting. Izv.vys.ucheb.zav.; mashinostr. no.4:80-85 '60. (MIRA 14:4)

1. Moskovskiy avtomekhanicheskiy institut.
(Centrifugal casting)

ALEKSANDROV, R.G.; BARBASHINA, Ye.G.; BAS'KO, K.P.; VARTAN'YAN, A.S. ; VASILEVSKIY, P.F.; GLAGOLEVA, L.A.; DUBININ, N.P., prof., doktor tekhn. nauk; KONSTANTINOV, L.S.; KOROTKOV, A.I.; LESNICHENKO, V.L.; PANFILOV, Ye.A.; TRUBITSYN, N.A.; TUCHKEVICH, N.M.; FADEYEV, A.D.; FOKIN, G.F.; MARTENS, S.L., inzh., red.; SOKOLOVA, T.F., tekhn. red.

[Steel casting; foundrymen's handbook] Stal'noe lit'e; spravochnik dlia masterov liteinogo proizvodstva. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1961. 887 p. (MIRA 14:8)
(Founding)

YUDIN, S.B.; ROZENFEL'D, S.Ye.; LEVIN, M.M.; KONSTANTINOV, L.S.,
kand. tekhn. nauk, retsenzent; MARKIZ, Yu.L., inzh.,
red.; TIKHANOV, A.Ya., tekhn. red.; EL'KIND, V.D., tekhn. red.

[Centrifugal casting] TSentrobezhnoe lit'e. Moskva, Mashgiz, 1962.
360 p. (MIRA 15:7)
(Centrifugal casting)

ALEKSEYEV, S.A.; BALABIN, V.V.; BARBASHIN, N.N.; GORSHKOV, A.A.; ZHAROV, N.T.; MARIYENBAKH, L.M.; RUBTSOV, N.N., doktor tekhn. nauk, prof.[deceased]; SERGEYEV, V.S.; SOSNENKO, M.N.; FROLOV, V.V.; KONSTANTINOV, L.S., kand. tekhn. nauk, red.; CHERNYAK, O.V., red. izd-va; UVAROVA, A.F., tekhn. red.; TIKHANOV, A.Ya., tekhn. red.

[Fondryman's handbook; general information on founding]Spravochnik liteishchika; obshchie svedeniia po lit'iu. [By]S.A.Alekseyev i dr. Pod obshchei red. N.N.Rubtsova. Moskva, Mashgiz, 1962. 524 p. (MIRA 16:1)

(Founding--Handbooks, manuals,etc.)

BALANDIN, G.F.; KONSTANTINOV, L.S., kand. tekhn. nauk, retsenzent

[Crystal structure formation in castings; pure metals and single-phase alloys] Formirovanie kristallicheskogo stroeniia otlivok; chistye metally i odnofaznye splavy. Moskva, Mashinostroenie, 1965. 254 p. (MIRA 18:5)

KONSTANTINOV, L.V.

SKACHKOV, Sergey Vladimirovich; KONSTANTINOV, Leonard Vasil'yevich;
STROGANOVA, Rimma Petrovna, YUROVA, Lidiya Nikolayevna, TOPORKOVA,
Eleonora Petrovna; RYDNIK, V.I., red.; MURASHOVA, N.Ya., tekhn.red.

[Collection of problems in nuclear physics] Sbornik zadach po iadernoi fizike. Moskva, Gos. izd-vo tekhniko-teoret. lit-ry, 1958. 164 p. (MIRA 11:3)
(Nuclear physics--Problems, exercises, etc.)

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S/120/62/000/002/041/047
E032/E514

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AUTHORS: Konstantinov, L.V., Reshetin, L.V. and Serebrennikov, Yu.M.

TITLE: A small fission chamber

PERIODICAL: Pribory i tekhnika eksperimenta, no.2, 1962, 171-172

TEXT: This device can be used in narrow nuclear reactor channels (1.5 mm wide, 300-400 mm deep). The design of the chamber is shown in Fig.1. The chamber is filled with commercial argon to a pressure of 15 atm. It can be used with neutron fluxes between 10^4 and 10^8 neutron/cm^{2}sec and with gamma-ray intensities up to 10^4 r/hr. There are 4 figures.

SUBMITTED: June 21, 1961

Fig.1. Legend. 1 - working volume, 2 - anode (tungsten wire covered with natural or 90% enriched (U^{235}) uranium; 0.3 mg/cm^2 and 3 mg/cm^2, respectively); 3 - stainless steel tube, 4 - copper block, 5 and 6 - glass insulators, 7 - tungsten to copper seal, 8 - copper tube for pumping and

Card 1/ /

SKACHKOV, Sergey Vladimirovich; KONSTANTINOV, Leonard Vasil'yevich;
STROGANOVA, Rimma Petrovna; YUROVA, Lidiya Nikolayevna;
TOPORKOVA, Eleonora Petrovna; VIRKO, I.G., red.; AKSEL'ROD,
I.Sh., tekhn. red.

[Problems in nuclear physics] Sbornik zadach po iadernoi fizike. Izd.2., perer. Moskva, Fizmatgiz, 1963. 222 p.
(MIRA 16:8)

(Nuclear physics)

AID Nr. 979-11 29 May

KONSTANTINOV, L.V.

NEUTRON FLUX CALCULATION IN SHUTDOWN REACTOR (USSR)

Konstantinov, L. V., and B. I. Kochetov. Atomnaya energiya, v. 14, no. 4, Apr 1963, 402-404. S/089/63/014/004/010/019

A method is presented for calculating the intensity of a photoneutron source used to raise the power level from subcritical to the required value during the restart of a shutdown nuclear reactor. The source uses fission fragments formed during reactor operation as γ-sources. Formulas are derived for calculating the power of a reactor whose core contains artificial neutron sources of the point, linear, and volume types. The formulas were checked experimentally on the reactor of the first nuclear power plant with reactor subcriticality $\Delta K = 0.093$ and an introduction of 8 kg of BeO. The introduction of Be into the reactor core increased the neutron flux by a factor of 2.3 to 2.5. The difference between theoretical and experimental results did not exceed 10%. To increase the efficiency of a photoneutron source, the beryllium in the core should be placed in zones of maximal γ-quanta flux of fission products. [AS]

Card 1/1

KONSTANTINOV, L.V.; YEFANOV, A.I.; POSTNIKOV, V.V.

Measurement of the frequency characteristics of an IRT-1000 type reactor by the oscillator method. Atom. energ. 15 no.4:332-334 O '63. (MIRA 16:10)

KONSTANTINOV, L. V.; ORLOV, Yu. V.; BONDARENKO, V. V.

"Physical start-up of the reactor at the Beloyarsk Atomic Power Station named after I. V. Kurchatov."

report submitted for 3rd Intl Conf, Peaceful Uses of Atomic Energy, Geneva, 31 Aug-9 Sep 64.

L 1165-66 EWT(m)/EPF(c)/EPF(n)-2/EWP(t)/EWP(b)/EWP(h) DIAAP/IJP(c)
JD/WW/JG

ACCESSION NR: AT5023151 UR/2892/65/000/004/0073/0077

42
38
B+1

AUTHOR: Konstantinov, L. V.; Serebrennikov, Yu. M.

TITLE: Use of a fission chamber for studying the shielding properties of materials 16 19 19

SOURCE: Moscow. Inzhenerno-fizicheskiy institut. Voprosy dozimetrii i zashchity ot izlucheniy, no. 4, 1965, 73-77

TOPIC TAGS: nuclear shielding, nuclear fission, thermal neutron, fast neutron, neutron shielding, neutron flux, uranium, plutonium, neptunium, thorium

ABSTRACT: Fission chambers are ionization with the difference that there is applied to the electrodes or one of the electrodes a layer of material capable of fission under the action of thermal or fast neutrons. The most common fissionable materials used are U^{233}, U^{235}, Pu^{239}, Np^{237}, Th^{232}, and U^{238}. The article describes the construction details of such chambers using schematic figures. The sensitivity of a fission chamber is determined by the amount of fissionable material and the thickness of the layer applied. Special chambers have been developed for measurement of neutron flux at points where the temperature reaches 800-

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900 C. The main factors determining the characteristics of the chamber are the dimensions and material of the electrodes, the thickness of the fissionable layer, the construction and material of the insulators, the gas filling the chamber, its pressure, and other construction features. The gases generally used are argon, nitrogen, carbon dioxide, xenon, krypton, or a mixture thereof. The pressure in the chamber can range from a few millimeters of mercury to tens of atmospheres. With respect to sensitivity, the chambers can be divided into three groups: high sensitivity impulse chambers for measurement of neutron fluxes from 1-10^5 neutrons/cm^2-sec; average sensitivity chambers for neutron fluxes from 10^5-10^{10} neutrons/cm^2-sec; and, low sensitivity current chambers for neutron fluxes from 10^{10}-10^{13} neutrons/cm^2-sec. The high sensitivity chambers have a large working surface and can hold up to 1 gram of fissionable material. A metallic spiral ribbon with the fissionable material is used in these chambers. The latest improved models of these fission chambers permit measurement of the neutron flux at points of the reactor at which measurements can not be made by other methods due to high neutron fluxes and gamma quanta or to high temperatures. Orig. art. has: 2 figures and 2 tables

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L 04674-67 EWT(m)

ACC NR: AP6018360 SOURCE CODE: UR/0089/66/020/005/0437/0438

AUTHOR: Yefanov, A. I.; Konstantinov, L. V.; Postnikov, V. V.; Sadikov, I. P.; Sokolov, M. P.

31

27

ORG: none

TITLE: Installation for oscillator measurements on a nuclear reactor 19

B

SOURCE: Atomnaya energiya, v. 20, no. 5, 1966, 437-438

TOPIC TAGS: nuclear reactor control equipment, reactor transient, nuclear reactor characteristic

ABSTRACT: The authors report an oscillator installation, intended for physical reactivity measurements in the reactor of the first block of the Baloyarsk Atomic Energy Station im. I. V. Kurchatov. This installation, used in conjunction with the permanent manual-control system and with an ionization chamber, was employed to measure the differential and integral efficiencies of manual-control rods, under different operating conditions, and also to determine the frequency characteristics of the reactor. The installation could be joined by means of the relay system to the drive of any of the manual-control rods, so that it was very useful for large scale measurements of the efficiency of a large number of rods within 1 - 1.5 hours without disturbing the normal operation of the reactor. The apparatus consists of an oscillation generator and a harmonic analyzer (Fig. 1). The oscillation generator contains a frequency divider and a two-position relay controlled by the output pulse of the frequency di-

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